Remarks/Arguments:

With this Response, the applicants amend claims 1, 4, 7, and 11. Claims 12-14 are cancelled as withdrawn from consideration by the Examiner. Support for the amendments to claim 1 are found at page 2, lines 11 and 12; page 2, line 32 to page 3, line 2; and originally filed claim 1. The remaining dependent claims have been amended for proper antecedent basis. No new matter has been added. Claims 1-11 are pending.

I. The Office Action

The Office Action rejects claims 1 and 8 under 35 U.S.C. § 102(b) as anticipated by Trocciola et al. (U.S. Patent No. 5,330,727). The Office Action also rejects claims 1, 2, 4, 5, and 7-10 under 35 U.S.C. § 103(a) as unpatentable over GB 2,075,859 (GB '859) in view of Heisel (U.S. Patent No. 4,988,431) and Cook (U.S. Patent No. 5,113,844). Claim 3 is rejected under 35 U.S.C. § 103(a) as unpatentable over GB '859 in view of Heisel and Cook in further view of Madgavkar et al. (U.S. Patent No. 4,186,801).

II. Lack of Anticipation

Claim 1 as amended requires that the reaction zones is *annular* in shape and comprises an oxidation catalyst *coated on a metal support* as described at page 3 lines 1-4 of the specification. The applicants are thus describing the state of the catalyst on a metal support. In contrast, at col. 4, line 64 through col. 5, line 10, Trocciola et al. discloses catalyst beds. The applicants submit that the state of the catalyst in Trocciola et al. is one of accumulated particles of the catalyst confined by the interior of reaction vessels 21 and 31 and maintained apart from the gas discharge 17 and 18 by way of members 23 and 33. Moreover, in this configuration, the applicants submit that the catalyst beds are not generally annular in shape. Thus, the applicants respectfully submit that the Trocciola et al. reference does not disclose a selective oxidation catalyst coated on a metal support and therefore does not disclose each and every limitation of the claimed invention. Reconsideration is respectfully requested.

III. Nonobviousness

The combination of GB '859 in view of Heisel and Cook does not disclose each and every limitation of amended claim 1. GB '259 does not disclose a catalyst coated on a metal support.

Reference numerals 24 are described as fixed annular catalyst beds. For the reasons set forth above, the applicants submit that a catalyst bed is not a catalyst coated on a metal support.

Also, the applicants disagree with the Examiner that each fixed annular catalyst bed 24 has two inlets for a first and second feedstock. With reference to FIG. 2 of GB '859, gas inlet nozzles 22 are shown to allow gas to pass into a first fixed annular catalyst bed 24. After the gas passes through the first fixed annular catalyst bed, it travels around shroud 28 radiating heat into heat exchanger tubes 38 and is directed to the next fixed annular catalyst bed by seal 31. The applicant submits that there is no inlet for a second feedstock as recited in claim 1. Because neither Heisel nor Cook disclose or suggest the limitations that GB '859 fails to disclose (i.e., a catalyst coated on a metal support and each stage having two inlets), the applicants respectfully submit that the rejection is in error and request the Examiner's reconsideration.

Regarding the rejection of dependent claims 3, 6, and 11, because these claims depends from claim 1, which the applicants assert is in a condition for allowance, the applicants submit that these dependent claims are also in a condition for allowance. For completeness, the applicants provide further reasons for the patentability of claim 3 in view of the citation of Madgavkar et al.

Madgavkar et al. is directed to an in situ combination process for the recovery of liquid carbonaceous fuels from subterranean formations. Madgavkar et al. does not disclose a selective oxidation catalyst process. Madgavkar et al. discloses a device that oxidizes all the components in a gaseous stream, which to one skilled in the art would understand that the device operates under an entirely different pressure and temperature conditions compared to selective oxidation reactions. The applicants submit that one skilled in the art would therefore not look to the teaching of Madgavkar et al. to modify the catalytic reactor with a catalyst of a honeycomb monolith carrier as suggested by the Office Action. The applicants respectfully request the Examiner's reconsideration.

IV. Conclusion

The applicants respectfully request the Examiner's reconsideration of the Office Action rejections in view of the above amendments and arguments. Amended claim 1 clarifies the state of the catalyst on the metal support. The prior art references cited in the Office Action do not disclose or suggest such a catalyst as in the claimed reaction vessel.

Respectfully submitted,

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The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. **18-0350** of any fees associated with this communication.

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Christian M. Bauer

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